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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/563,446

01/04/2006

Ikuo Shimoda

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8048

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EXAMINER

BURCH, MELODY M

ART UNIT

PAPER NUMBER

3657

MAIL DATE

DELIVERY MODE

05/26/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/563,446	Applicant(s) SHIMODA ET AL.	
	Examiner Melody M. Burch	Art Unit 3657	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,6 and 8-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,6 and 8-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 6, 8 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5445249 to Aida et al. in view of JP-542789 (JP'789).

Re: claims 1, 6, 8, and 14. Aida et al. show in figure 2 a dynamic vibration absorber comprising: a weight 1, a frame body 3 which surrounds the weight, a plurality of vertically mounted members 10,11,12 which are interposed between the frame body and the weight so as to hold the weight with respect to the frame body movably with respect to all directions in a plane and immovably in a vertical direction perpendicular to the plane as disclosed in col. 5 line 66 - col. 6 line 1, and a damping mechanism 2,6 for damping the vibration of the weight in the plane.

Aida et al. are silent with regards to the vertically mounted members being U-shaped leaf spring.

JP'789 teaches in figures 1 and 2 the use of U-shaped leaf springs 4, 6 used to damp movement of a weight 5 within a frame 3,10.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the vertically mounted members or magnetic

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dampers of Aida et al. to have been dampers in the form of U-shaped leaf springs, as taught by JP' 789, in order to provide a functionally equivalent means of creating a damping force which acts on the weight 1. Examiner notes that the comparable structure of the above combination compared to the instant invention supports a finding that the above combination functions so as to determine a natural frequency for the weight to the same extent as the instant invention functions so as to determine a natural frequency for the weight.

With regards to the number of magnetic generating bodies, in *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960) the court held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced.

3. Claims 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5445249 to Aida et al. in view of JP'789 as applied above, and further in view of US Patent 2004/0134733 to Wood.

Aida et al., as modified, are silent with regards to the tuning of the system.

Wood teaches in paragraph [0017] and in figure 2 the use of a dynamic absorber being tuned to a natural frequency of a structure where the dynamic vibration is installed and also teaches the use of a plurality of dynamic vibration absorbers wherein a natural frequency of the weight, the mass of the weight, the spring constant or the damping coefficient of at least one of the dynamic vibration absorbers is different from that of another.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the tuning of the system of Aida et al., as

modified, to have included the abovementioned tuning arrangement, as taught by Wood, in order to provide a quieter machine or system.

Response to Arguments

4. Applicant's arguments filed 2/16/10 have been fully considered but they are not persuasive. Applicant argues that Aida, as modified, does not disclose a damping mechanism disposed between the concave surface of one of at least two of the leaf springs and the concave surface of the other of the at least two of the leaf springs. Examiner disagrees. JP'789 teaches the presence of a pair of U-shaped leaf springs 4 or 6 on all four sides of a central structure 5. Modifying the vertically mounted members of Aida with a U-shaped leaf spring arrangement, as taught by JP'789, results in four pairs of U-shaped leaf springs situated circumferentially around the damping mechanism components. Examiner notes that the damping mechanisms are consequently disposed between the concave surfaces of two diametrically opposed U-shaped leaf springs, as broadly recited, similar to the way in element 8 of JP'789 is between the concave surfaces of two diametrically opposed U-shaped leaf springs 4, 4 and 6, 6. Accordingly, since no other arguments were presented, the rejections have been maintained.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 571-272-7114. The examiner can normally be reached on Monday-Friday (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on 571-272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

mmb
May 23, 2010

/Melody M. Burch/
Primary Examiner, Art Unit 3657